

## CLAIMS

- 1/ A method of dynamically representing a multimedia document in a data-processing system via a software module, said multimedia document being made up of a hierarchically-organized set of elements (1, 4), themselves having attributes, at least one of said attributes being associated with an event-condition-action or "ECA" type formalism (7, 9, 10), said method being characterized in that it comprises the following ordered steps:
- describing said multimedia document in a description language; and
  - having said multimedia document interpreted by said software module, said ECA formalisms being interpreted dynamically so as to enable the representation of said multimedia document to be varied by means of actions being performed as a function of events and of conditions.
- 2/ A method according to claim 1, characterized in that said multimedia document includes a portion describing said elements, and a portion describing said formalisms, and in that the associations between said elements and said formalisms are established by identifiers.
- 3/ A method according to ~~any preceding claim~~<sup>claim 1</sup>, characterized in that said description language complies with the XML Recommendation.
- 4/ A method according to ~~any preceding claim~~<sup>claim 1</sup>, in which method the hierarchically-organized set is made up of "composite" elements, each of which is made up of "contained" elements, the attributes of the various elements being "statuses" which describe the states of the various portions of the document, and in which method an event is constituted by a change in the value of a status of an element being detected by said element and

resulting in an action being performed to change the appearance or the behavior of the document, when a condition constituted by a logic expression associating status values relating to various elements is satisfied.

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5/ A multimedia document made up of a hierarchically-organized set of elements (1, 4) themselves having attributes, at least one of said attributes being associated with an event-condition-action or "ECA" type formalism (7, 9, 10), said multimedia document being characterized in that it is described in a description language, and in that said ECA formalisms are described in a manner such as to enable them to be interpreted by a software module so as to enable the representation of said multimedia document to be varied by means of actions being performed as a function of events and of conditions.

6/ A multimedia document according to claim 5, characterized in that said multimedia document includes a portion describing said elements, and a portion describing said formalisms, and in that the associations between said elements and said formalisms are established by identifiers.

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7/ A multimedia document according to claim 5 ~~or 6~~, characterized in that said description language complies with the XML Recommendation.

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8/ A multimedia document according to ~~any one of claims 5 to 7~~, in which document the hierarchically-organized set is made up of "composite" elements, each of which is made up of "contained" elements, the attributes of the various elements being "statuses" which describe the states of the various portions of the document, and in which document an event is constituted by a change in the value of a status of an element being detected by said element

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and resulting in an action being performed to change the appearance or the behavior of the document, when a condition constituted by a logic expression associating status values relating to various elements is satisfied.

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